Guidelines for setting up the RHD and acute rheumatic fever dataset in Communicare

Version 1.0 (August 2015)

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Prerequisites

This document assumes you are using Communicare 14.7 or later and have requested the ‘RHD and acute rheumatic fever’ dataset. This dataset has two clinical items:

- ‘Check up;RHD and acute rheumatic fever’; and
- ‘Review;GP;RHD and ARF’

with some automated ‘on qualifier’ recall rules.

However, this document may be used as a guideline for health services that already have their own RHD check-up and review items – simply substitute your local items when the document refers to the central items.

It is also assumed that you use ICPC2-Plus as your principle clinical coding system or have created local clinical items of type ‘Condition’ to code RHD diagnoses.

Finally, you will need to have a local clinical item to be used to record secondary prophylaxis (commonly ‘Injection;Bicillin LA’) which must be configured with the export code ‘BICILLIN’.
Triggering the first check-up

The trigger for the first check-up for a patient should be the recording of the diagnosis. For this we need a set of ‘on presentation’ rules.

You can configure the check-up to be triggered by either a set of specific diagnoses or by any diagnosis in a specific clinical item group.

Triggering a check-up from a clinical item group

You can configure a recall rule to offer a check-up immediately following any diagnosis in the RHEUMATIC FEVER/HEART DISEASE group:

Currently (August 2015) this group comprises these diagnoses:

<table>
<thead>
<tr>
<th>Disease;rheumatic heart</th>
<th>Carditis;rheumatic;acute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease;rheumatic heart;mild</td>
<td>Carditis;rheumatic;chronic</td>
</tr>
<tr>
<td>Disease;rheumatic heart;moderate</td>
<td></td>
</tr>
<tr>
<td>Disease;rheumatic heart;severe</td>
<td></td>
</tr>
<tr>
<td>Rheumatic fever</td>
<td>Endocarditis;rheumatic</td>
</tr>
<tr>
<td>Rheumatic fever;acute</td>
<td></td>
</tr>
<tr>
<td>Chorea</td>
<td>Myocarditis;rheumatic;acute</td>
</tr>
<tr>
<td>Chorea;rheumatic</td>
<td>Myocarditis;rheumatic;chronic</td>
</tr>
<tr>
<td>Chorea;Sydenhams</td>
<td></td>
</tr>
<tr>
<td>Stenosis;aortic;rheumatic</td>
<td>Pericarditis;rheumatic;acute</td>
</tr>
<tr>
<td>Stenosis;arterial;rheumatic</td>
<td>Pericarditis;rheumatic;chronic</td>
</tr>
<tr>
<td>Stenosis;mitral;rheumatic</td>
<td></td>
</tr>
</tbody>
</table>

The gender, Aboriginal, maximum age and minimum age can be configured to suit your needs.

Triggering a check-up from a clinical item

If it is not appropriate for all these diagnoses to trigger a check-up then you need to create a rule for each diagnosis that you wish to include:
General comments for enabling ‘on presentation’ recall rules

When a recall rule such as this is enabled it will do the following:

- Find all patients with a pre-existing condition that is a trigger for the rule and add a recall for a check-up, due the same day as the initial diagnosis, if that patient does not yet have either a recall, cancelled recall or completed item for the check-up. If a check-up is found in any state then a recall will not be added.
- Any rules concerning the maximum or minimum age of the patient will apply to the age of the patient at the time of the diagnosis.
- For a patient who has multiple diagnoses for the same item (or items in the same group) there will only be one recall created and the due date will be the date of the latest diagnosis.
- Henceforth, when new diagnoses are added there will be a prompt for the user to accept offering a recall for a check-up due immediately.

Guidelines for setting up the RHD and acute rheumatic fever dataset in Communicare
**Triggering on-going management**

Once the first check-up has been completed we need a set of ‘on qualifier’ and ‘on completion’ rules to continue the recall protocols for the patient.

The dataset creates these rules:

- On recording an outcome for the qualifier ‘**Next RHD/ARF check up due**’ a recall is offered for the next ‘**Check up;RHD and acute rheumatic fever**’ due according to the interval specified.
- On completing a positive outcome for the qualifier ‘**GP review required?**’ a recall is offered for a ‘**Review;GP;RHD and ARF**’ due immediately.

**General comments for enabling ‘on qualifier’ recall rules**

When a recall rule such as this is enabled it will do the following:

- For patients who already have a response to the qualifier the recall rule will do nothing – if is effective only from the date of enabling.
- Henceforth, when new responses are added there will be a prompt for the user to accept offering a recall for the appropriate item due after the specified interval.

**Secondary prophylaxis injections**

You will need a trigger for the first such recall and then an ongoing ‘on completion’ recall to manage the four-weekly or three-weekly injections.

**Triggering from the diagnosis**

Commonly, a health service will already have a recall rule to trigger the Bicillin injections. It may be triggered by a group of conditions (see below) or by a selection of specific conditions in different rules (see page 4).

If this rule is introduced it will check all previous diagnoses of RHD and add a recall if there has never been a Bicillin recorded.

**Triggering from the check up**

This is the same idea as above but relies on the first check-up being completed before triggering the first injection:
Ongoing triggers

Once the first injection has been given this rule will maintain recalls until cancelled:

Note that the default is for 4 weeks but when the prompt is given to the user they can adjust this to 3 weeks if required and this value will be remembered for that patient until it is altered again in the future:
Echocardiography
Recalls for the clinical item 'Echocardiography' can be triggered ‘on qualifier’ based on the response to the dropdown box called ‘Echocardiography due’ such that there are six rules:
Response of ‘12 months’ triggers a recall for Echocardiography due in 12 months
Response of ‘2 years’ triggers a recall for Echocardiography due in 2 years
Response of ‘3 months’ triggers a recall for Echocardiography due in 3 months
Response of ‘3 years’ triggers a recall for Echocardiography due in 3 years
Response of ‘6 months’ triggers a recall for Echocardiography due in 6 months
Response of ‘Now’ triggers a recall for Echocardiography due in 0 days

Specialist follow-ups
The check-up has required qualifiers to declare when the next review is due by:

Cardiologist – ‘Cardiologist review due’
Physician – ‘Physician review due’
Paediatrician - ‘Paediatric review due’
Dentist – ‘Dental review due’

(the recalls for the GP review and next check-up are centrally distributed).

Depending on the health service, different approaches will be taken to recording recalls for these reviews. A large health service may require recalls for appropriate reviews or consults and the specialists may be ‘in-house’. Health services may have visiting specialists and prefer to trigger recalls for the same or for referrals. More remote health services may trigger referrals to external specialist away from the community.

If you already have clinical items for specialist reviews then these can be used in the recall rules. Otherwise, consider the following ICPC terms:

Recalls for ‘in-house’ management
Use these items as a recall for the next consult/review by each specialist:
Consult;cardiologist
Consult;physician* (you will need to create this item locally)
Consult;paediatrician
Consult;dentist

Recalls for external management or for formal referral details to be recorded
Referral;cardiologist
Referral;physician
Referral;paediatrician
Referral;dentist

See the Appendix for how to set up these rules.
Summary

This document contains details of the technical set-up of recall protocols for the management of RHD and acute rheumatic fever. They are not clinical advice although they reflect clinical guidelines.

Care should be taken to review existing protocols before implementing any of these rules. If locally-defined clinical items are to be used then the rules need to be set up manually.

If, however, you wish to implement any of these recall protocols ‘as is’ (for example, you wish to use the specialist referral recalls) then do contact the Communicare helpdesk as we may be able to insert these rules automatically for you.

Finally, any questions regarding clinical procedures should be directed to an appropriate clinical body and any questions regarding the implementation or behaviour of these rules can be directed to the Communicare helpdesk.

**NT Rheumatic Heart Disease Register contact information:**

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*August 2015*
### Appendix

**Summary of recall rules to consider implementing**

#### Rules to trigger first check-up using clinical item group:

<table>
<thead>
<tr>
<th>RHEUMATIC FEVER/HEART DISEASE</th>
<th>On Presentation</th>
<th>Check up; RHD and acute rheumatic fever</th>
<th>0 days</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Alternatively, trigger first check-up using individual conditions:</em></td>
<td>On Presentation</td>
<td>Check up; RHD and acute rheumatic fever</td>
<td>0 days</td>
</tr>
<tr>
<td>Disease; rheumatic heart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease; rheumatic heart; mild</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Rules to manage secondary prophylaxis:

<table>
<thead>
<tr>
<th>RHEUMATIC FEVER/HEART DISEASE</th>
<th>On Presentation</th>
<th>Injection; Bicillin LA</th>
<th>0 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injection; Bicillin LA</td>
<td>On Completion</td>
<td>Injection; Bicillin LA</td>
<td>4 weeks</td>
</tr>
<tr>
<td><em>Alternatively, trigger the first injection on completion of a Check up; RHD and acute rheumatic fever</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Rules to manage echocardiography:

<table>
<thead>
<tr>
<th>Echocardiography due</th>
<th>On Qualifier</th>
<th>Echocardiography</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months</td>
<td>On Qualifier</td>
<td>Echocardiography</td>
<td>12 months</td>
</tr>
<tr>
<td>2 years</td>
<td>On Qualifier</td>
<td>Echocardiography</td>
<td>2 years</td>
</tr>
<tr>
<td>3 months</td>
<td>On Qualifier</td>
<td>Echocardiography</td>
<td>3 months</td>
</tr>
<tr>
<td>3 years</td>
<td>On Qualifier</td>
<td>Echocardiography</td>
<td>3 years</td>
</tr>
<tr>
<td>6 months</td>
<td>On Qualifier</td>
<td>Echocardiography</td>
<td>6 months</td>
</tr>
<tr>
<td>Now</td>
<td>On Qualifier</td>
<td>Echocardiography</td>
<td>0 days</td>
</tr>
</tbody>
</table>

#### Rules to manage specialist reviews:
<table>
<thead>
<tr>
<th>Review Type</th>
<th>Frequency</th>
<th>On Qualifier</th>
<th>Action</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiologist review due</td>
<td>12 months</td>
<td>On Qualifier</td>
<td>Consult; cardiologist or Referral; cardiologist</td>
<td>12 months</td>
</tr>
<tr>
<td>Cardiologist review due</td>
<td>3 months</td>
<td>On Qualifier</td>
<td>Consult; cardiologist or Referral; cardiologist</td>
<td>3 months</td>
</tr>
<tr>
<td>Cardiologist review due</td>
<td>6 months</td>
<td>On Qualifier</td>
<td>Consult; cardiologist or Referral; cardiologist</td>
<td>6 months</td>
</tr>
<tr>
<td>Cardiologist review due</td>
<td>Now</td>
<td>On Qualifier</td>
<td>Consult; cardiologist or Referral; cardiologist</td>
<td>0 days</td>
</tr>
<tr>
<td>Physician review due</td>
<td>12 months</td>
<td>On Qualifier</td>
<td>Consult; physician or Referral; physician</td>
<td>12 months</td>
</tr>
<tr>
<td>Physician review due</td>
<td>3 months</td>
<td>On Qualifier</td>
<td>Consult; physician or Referral; physician</td>
<td>3 months</td>
</tr>
<tr>
<td>Physician review due</td>
<td>6 months</td>
<td>On Qualifier</td>
<td>Consult; physician or Referral; physician</td>
<td>6 months</td>
</tr>
<tr>
<td>Physician review due</td>
<td>Now</td>
<td>On Qualifier</td>
<td>Consult; physician or Referral; physician</td>
<td>0 days</td>
</tr>
<tr>
<td>Paediatric review due</td>
<td>12 months</td>
<td>On Qualifier</td>
<td>Consult; paediatrician or Referral; paediatrician</td>
<td>12 months</td>
</tr>
<tr>
<td>Paediatric review due</td>
<td>3 months</td>
<td>On Qualifier</td>
<td>Consult; paediatrician or Referral; paediatrician</td>
<td>3 months</td>
</tr>
<tr>
<td>Paediatric review due</td>
<td>6 months</td>
<td>On Qualifier</td>
<td>Consult; paediatrician or Referral; paediatrician</td>
<td>6 months</td>
</tr>
<tr>
<td>Paediatric review due</td>
<td>Now</td>
<td>On Qualifier</td>
<td>Consult; paediatrician or Referral; paediatrician</td>
<td>0 days</td>
</tr>
<tr>
<td>Dental review due</td>
<td>12 months</td>
<td>On Qualifier</td>
<td>Consult; dentist or Referral; dentist</td>
<td>12 months</td>
</tr>
<tr>
<td>Dental review due</td>
<td>3 months</td>
<td>On Qualifier</td>
<td>Consult; dentist or Referral; dentist</td>
<td>3 months</td>
</tr>
<tr>
<td>Dental review due</td>
<td>6 months</td>
<td>On Qualifier</td>
<td>Consult; dentist or Referral; dentist</td>
<td>6 months</td>
</tr>
<tr>
<td>Dental review due</td>
<td>Now</td>
<td>On Qualifier</td>
<td>Consult; dentist or Referral; dentist</td>
<td>0 days</td>
</tr>
</tbody>
</table>